



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,687	09/05/2003	Rainer Nebosis	AGFA 264-KFM MU 02015-US	6490
10037	7590	06/14/2005	EXAMINER PHAM, HAI CHI	
MILDE & HOFFBERG, LLP 10 BANK STREET SUITE 460 WHITE PLAINS, NY 10606			ART UNIT 2861	PAPER NUMBER

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/655,687	Applicant(s) NEBOSIS, RAINER	
	Examiner Hai C. Pham	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/05/03 & 12/09/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/05/03</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Drawings*

1. The drawings were received on 12/09/03. These drawings are accepted.

### *Priority*

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-4, 6-8, 15-16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kitamura (U.S. 4,367,912).

Kitamura discloses in Figs. 1-3 an optical module for exposing an image reproduction element comprising at least one light source device (semiconductor laser 12), at least one beam forming device (polygon mirror 1) optically coupled with said at least one light source device for providing at least one optical beam, and a heat transfer device (peltier element) thermally coupled with said at least one light source device and said at least one beam forming device, wherein the heat transfer device comprises a heat pump (the peltier element used as heat pump) (col. 3, lines 6-15). Kitamura further teaches a heat conductive coupling (radiating fin 13) between the heat pump and the device to be heated or cooled.

The method claims 15-1 and 18 are deemed to be clearly anticipated by functions of the above structures.

5. Claims 9-12, 14, 19-20 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Itabashi (U.S. 6,700,687).

Itabashi discloses an optical device comprising a thermally conductive housing (housing 20), at least one optical device (polygon mirror 8), capable of being heated and cooled, positioned within, and thermally coupled to said housing (the polygon mirror is directly mounted on the housing), and a heat transfer device (cooling part or peltier element 27) thermally coupled to said housing (Fig. 7), whereby said at least one optical

device may be indirectly heated or cooled via the housing, wherein the heat transfer device comprises a heat pump (e.g., peltier element 27).

The method claims 19-20 and 22 are deemed to be clearly anticipated by functions of the above structures.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura in view of Asami et al. (U.S. 5,415,978).

Kitamura et al. discloses all the basic limitations of the claimed invention except for the heat transfer device includes a regulating device for regulating the temperature of the device to be heated or cooled.

Asami et al. discloses an image forming method and apparatus, in which peltier elements (114 and 118) and a temperature control device, which includes temperature sensors (120, 124) and drive control circuits (122 and 126) are provided to control the operation of the peltier element so as to maintain the laser light source at a predetermined temperature in a controlled manner (Fig. 4).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a temperature control device in the device of Kitamura as taught by Asami et al. The motivation for doing so would have been to control the operation of the peltier element so as to maintain the laser light source at a predetermined temperature in a controlled manner as suggested by Asami et al.

8. Claims 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itabashi in view of Asami et al.

Itabashi discloses all the basic limitations of the claimed invention except for the heat transfer device includes a regulating device for regulating the temperature of the device to be heated or cooled.

Asami et al. discloses an image forming method and apparatus, in which peltier elements (114 and 118) and a temperature control device, which includes temperature sensors (120, 124) and drive control circuits (122 and 126) are provided to control the operation of the peltier element so as to maintain the laser light source at a predetermined temperature in a controlled manner (Fig. 4).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a temperature control device in the device of Itabashi as taught by Asami et al. The motivation for doing so would have been to control the operation of the peltier element so as to maintain the laser light source at a predetermined temperature in a controlled manner as suggested by Asami et al.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM  
PRIMARY EXAMINER

June 11, 2005